

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		
First Named Inventor	Alvin Janski	
Art Unit		
Examiner Name		
Attorney Docket Number	KEDI 8828 W1	

**U.S. PATENTS**

Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	6416479	B1	2002-07-09	Seidman	

If you wish to add additional U.S. Patent citation information please click the Add button.

**U.S. PATENT APPLICATION PUBLICATIONS**

Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button.

**FOREIGN PATENT DOCUMENTS**

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup>	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1							<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button

**NON-PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		
	First Named Inventor	Alvin Janski	
	Art Unit		
	Examiner Name		
	Attorney Docket Number	KEDI 8828 W1	

1		K. SYLVESTER, R. PATEY, J. HALL, G. FAFFERTY, M. DICK, S.L. THEIN, A. GREENOUGH, "Measurement of exhales carbon monoxide in children with sickle cell disease", Presentation abstract published in European Respiratory Journal 2002, Supplement 38, pg. 139, London, United Kingdom, Presented at ERS Annual Congress, Stockholm, Sept. 15, 2002.	<input type="checkbox"/>
2		Copy of Written Opinion of the International Searching Authority corresponding to International Application No. PCT/US05/03398.	<input type="checkbox"/>
3		Copy of Search Report corresponding to International Application No. PCT/US05/03398.	<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature	/Navin Natnithithadha/ (01/29/2011)	Date Considered	01/29/2011
<p><b>*EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>			
<p><small><sup>1</sup> See Kind Codes of USPTO Patent Documents at <a href="http://www.USPTO.GOV">www.USPTO.GOV</a> or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.</small></p>			

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		
First Named Inventor	Alvin Janski	
Art Unit		
Examiner Name		
Attorney Docket Number	KEDI 8828 W1	

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ None

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	<i>Mark E. Books</i>	Date (YYYY-MM-DD)	2006-07-27
Name/Print	Mark E. Books	Registration Number	40918

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**



10/588221  
IAP11 Rec'd PCT/PTD 27 JUL 2006

## Measurement of exhaled carbon monoxide in children with sickle cell disease

K. Sylvester, R. Patey, J. Hall, G. Rafferty, M. Dick, S. L. Thein, A. Greenough (London, United Kingdom)

**Background:** Carboxyhaemoglobin (COHb) is elevated in conditions of haem catabolism. End tidal exhaled carbon monoxide (ETCO) is related to COHb and can be measured nasally in all age groups. We hypothesised that in children with sickle cell disease (SCD) ETCO would be elevated and reduced by blood transfusion. **Methods:** ETCO was measured in non smoking subjects: 10 SCD children in steady state (mean age 10.5yrs, range 3.5 to 13.4yrs), 10 healthy ethnic-matched controls (mean age 10.3yrs, range 3.4 to 15.6yrs) and 11 SCD children (mean age 10.7yrs, range 5.2 to 17.6yrs) undergoing a regular blood transfusion to reduce SCD complications. ETCO, corrected for background CO (ETCOc), was measured by the CO-Stat<sup>(R)</sup> End Tidal Breath Analyzer (Natus Medical Inc., San Carlos, CA). In the transfusion group, ETCOc was measured before, midway and at the end of the transfusion. **Results:** ETCOc levels were higher ( $p < 0.0001$ ) in the SCD children in steady state (mean 5.6, 95% CI 4.3 to 6.9ppm) than the controls (mean 1.5, 95% CI 1.1 to 1.9ppm). In the transfusion group, ETCOc was lower during (mean 5.8, 95% CI 4.5 to 7.1ppm,  $p = 0.048$ ) and after (mean 5.3, 95% CI 3.8 to 6.7ppm,  $p = 0.01$ ) the transfusion compared to before transfusion (mean 6.3ppm, CI 4.7 to 7.8). **Conclusion:** These preliminary results suggest ETCO measurement could be a useful method of monitoring SCD children at risk of haemolytic crises and their response to treatment.

*Eur Respir J* 2002; 20: Suppl. 38, 139s

This abstract was presented at the ERS Annual Congress Stockholm 2002 on Sunday 15.09.2002 in session 110 : "Paediatric respiratory physiology - clinical aspects".